



United States  
Department of  
Agriculture

Soil  
Conservation  
Service

FCS BLDG., SUITE 600  
375 JACKSON STREET  
ST. PAUL, MN 55101

April 8, 1994

NATIONAL ENGINEERING HANDBOOK (NEH)  
210-VI-NEH  
Amendment MN1 (Part 651)

SUBJECT: ENG - AGRICULTURAL WASTE MANAGEMENT FIELD HANDBOOK  
(AWMFH) PART 651

Purpose. To distribute MN Amendment 1, Standard Gutter  
Dimensions and Pen and Ink changes to Chapter 10.

Effective Date. This amendment is effective upon receipt.

This amendment distributes Figure MN10-1, Standard Gutter  
Dimensions, dated March 1994. File in Chapter 10 after page  
10-2.

Make pen and ink changes to the volume equation for  
rectangular ponds in some parts of Chapter 10. The correct  
equation for determining the volume of a rectangular is as  
follows:

$$V = (4 * Z^2 * d^3) / 3 + (Z * BL * d^2) + (Z * BW * d^2) + (BW * BL * d)$$

The equation as used in Worksheet 10A-2, page 10A-2 and in  
Worksheet 10A-4, page 10A-6 is wrong. In both cases, the  
(Z \* BW \* d<sup>2</sup>) portion of the equation is missing. Worksheet  
10A-3, page 10A-4 uses the correct equation.

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State Conservationist

Enclosures

DIST: AWMFH



The Soil Conservation Service  
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